(No Model.)

J. R. WEIRICK.

PATTERN LIFTER.

No. 413,248. Patented Oct. 22, 1889.

FIG. 1.

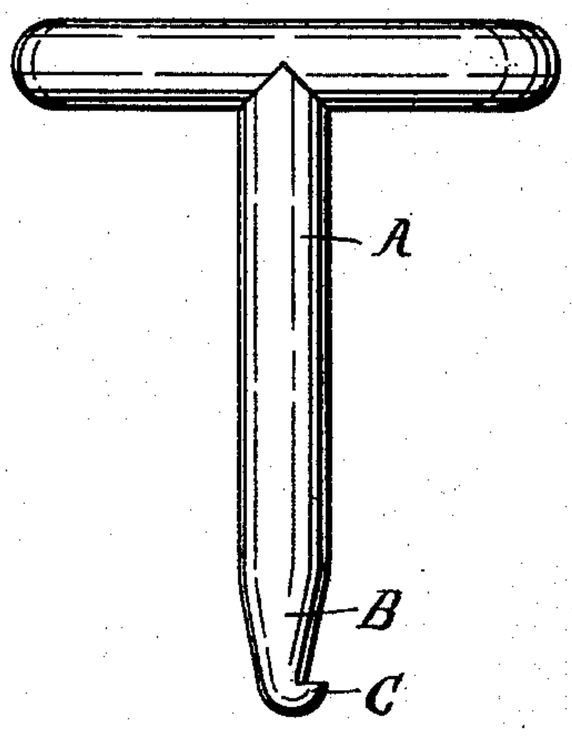


FIG. 3.

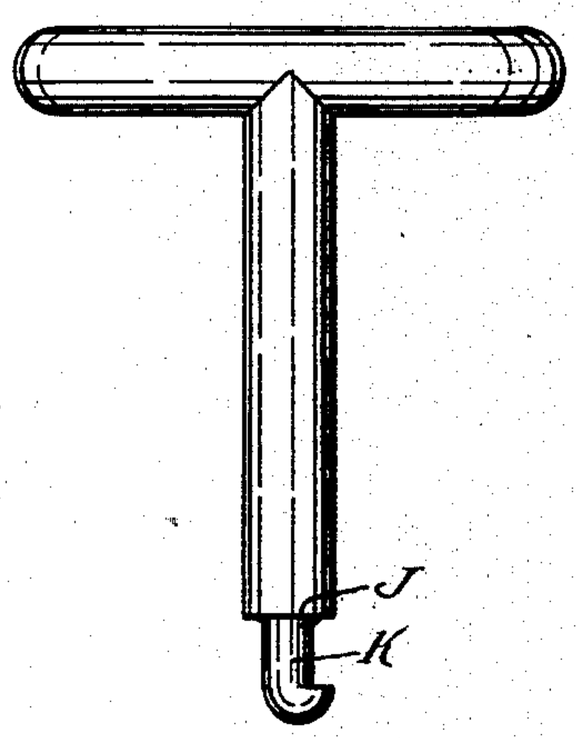


FIG. 2.

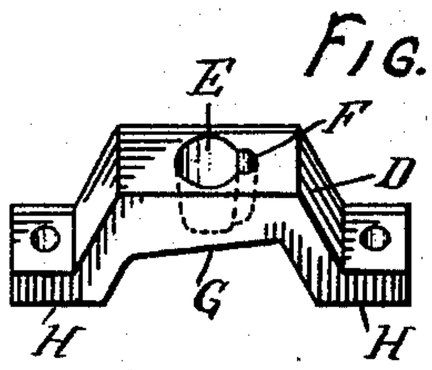


FIG. 4.

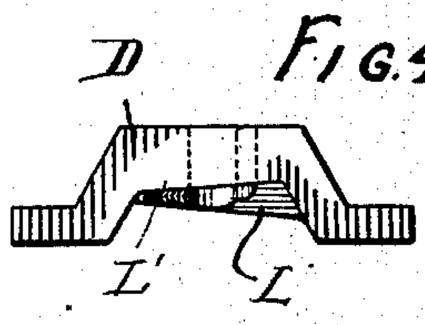
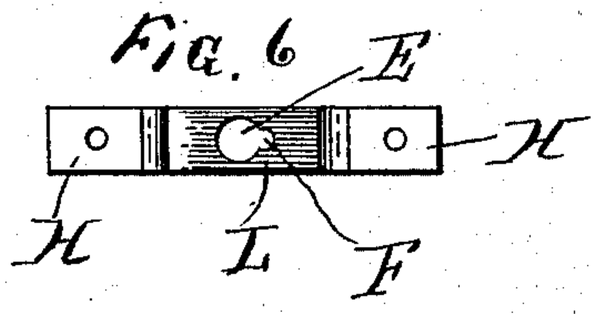
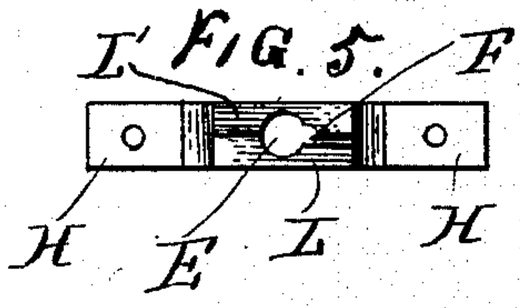


FIG. 6



L' FIG. 5.



WITNESSES

C. J. Dwight.

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INVENTOR

By Attorney

UNITED STATES PATENT OFFICE.

JACOB R. WEIRICK, OF READING, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO HENRY J. HUNSICKER, OF SAME PLACE.

PATTERN-LIFTER.

SPECIFICATION forming part of Letters Patent No. 413,248, dated October 22, 1889.

Application filed March 29, 1889. Serial No. 305,268. (No model.)

To all whom it may concern:

Be it known that I, JACOB R. WEIRICK, a citizen of the United States, residing at Reading, in the county of Berks and State of Pennsylvania, have invented certain new and useful Improvements in Pattern-Lifters; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to an improved device adapted especially for lifting patterns from the sand. Heretofore a handle having a screw-threaded stem has been generally used for this purpose. This is screwed into a tapped plate secured to the pattern, and is rapped to loosen the latter before withdrawing it. The sand which lodges in the recesses of the thread, as also the rapping referred to, soon destroys the thread and necessitates frequent renewal. A handle with a beveled end has also been used in connection with a dovetailed receiver.

My object is to provide a lifter of economical construction which can be quickly and firmly secured to the pattern by merely pushing the stem of the handle into a recess on the pattern and turning it slightly until firmly held.

The invention consists in providing the handle with a hooked end of reduced size which enters a perforated receiver and engages a beveled under surface of the latter, which causes the handle to be drawn into fixed connection with it when the handle is rotated a greater or less distance.

Figure 1 shows the handle. Fig. 2 shows the receiver in perspective. Figs. 3 and 4 show a modified handle and receiver; and Figs. 5 and 6 are bottom plan views, respectively, of the plates shown in Figs. 2 and 4.

The end B of the handle-stem A is tapered and formed with a hook C. The receiver-plate D is secured to the upper surface of the pattern, the faces H being in contact with it and the central portion raised above it. This raised portion has a tapering perforation E, corresponding with the stem end B, which has an extension F to permit the passage of the hook C. The under surface of the raised portion is beveled, as shown at G.

In using the lifter the end B of the handle enters the receiver until the hook C has passed through the perforation. The handle is then turned in either direction, the hook pressing against the beveled surface G until the tapered end solidly fills the perforation E, when the handle may be rapped and the pattern withdrawn in the most satisfactory manner. The perforation is easily cleared of sand, wear is readily taken up by turning the handle, and the connection is always central and firm. I prefer to cast both handle and receiver in malleable iron, using them without any subsequent finish.

It is evidently not essential that the end of the handle shall be tapering, as already described. It may be as shown in Fig. 3, with a straight end K and a shoulder J, which can be drawn tightly against the upper surface of the receiver. The latter also may be differently shaped. In Fig. 4 the under surface L L′ of the raised portion is represented as beveled, so that the handle may be tightened through a whole turn instead of a half-turn, as contemplated by the previously-described construction. In this case, however, it can only be tightened by turning in one direction.

What I claim is—

1. A pattern-lifter consisting of a handle having a stem with hooked end of reduced size, in combination with a receiver perforated to admit said hooked end and having a beveled under surface, all substantially as set forth.

2. A pattern-lifter consisting of a handle having a stem with tapering hooked end, substantially as described, in combination with a receiver having a tapering perforation adapted to admit said end and a beveled under surface, whereby said handle is firmly secured by rotating it, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JACOB R. WEIRICK.

Witnesses:

W. G. STEWART,

ROBERT L. KEITH.